



Dam Safety Inspection Form

State of Oregon
Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301-1271
(503) 986-0900

Name of Dam: Malheur (Willow 3) File #: W-6
Height: 119 ft. Storage: 20,400 ac. ft. Permit: _____ NID #: OR- 00212
Hazard: ☐ Low ☐ Significant ☒ High Inspector(s): Mills, Jacobs District: 9
Others on site: McBride
Date: 5-3-17 Temperature: 80°F ☐ Dry ☐ Rain ☐ Snow ☐ Now ☐ Recently
Prior Inspection Date: 6-14-16 Issues from prior inspection: operation of large valve (cycling)

Rating Criteria: 5-Exemplary; 4-Adequate 3-Maintenance or minor repair needed
2-Serious repair needed; 1-Urgent dam safety issue - action now - Contact owner and dam safety directly

General	Rating
Structures below dam <input type="checkbox"/> New <input checked="" type="checkbox"/> Existing <input type="checkbox"/> Request Dam Safety review of hazard rating	
Distance to dam Dwelling _____ feet Paved public road _____ feet Other building _____ feet <u>many</u>	
Vehicle access <input type="checkbox"/> All weather road <input checked="" type="checkbox"/> Dirt road <input type="checkbox"/> Cross country	<u>4</u>
Detail:	

Reservoir	Pool level: <u>384.92</u> Point of Reference: <input type="checkbox"/> Crest <input checked="" type="checkbox"/> Gage _____	Rating
Minimum freeboard Vertical distance from debris line to lowest place on crest <u>30+</u> ft.		<u>4</u>
Debris <input type="checkbox"/> Floating Debris/Trash <input type="checkbox"/> Log Boom <input type="checkbox"/> Unusual Conditions		<u>4</u>
Detail:		

Spillway	<input type="checkbox"/> Earth <input type="checkbox"/> Rock <input type="checkbox"/> Concrete <input type="checkbox"/> Other	Rating
Modifications <input type="checkbox"/> None <input type="checkbox"/> Reduction in capacity <input type="checkbox"/> Feature not on design		
Approach Channel <input type="checkbox"/> Clear <input type="checkbox"/> Trees/brush <input type="checkbox"/> Debris <input type="checkbox"/> Erosion		
Control Section <input type="checkbox"/> Concrete <input type="checkbox"/> Rock <input type="checkbox"/> Soil <input type="checkbox"/> Culvert <input type="checkbox"/> Unstable Width _____ Depth _____		
Flashboards/Gate <input type="checkbox"/> None <input type="checkbox"/> In place <input type="checkbox"/> Operational <input type="checkbox"/> Deteriorated		
Discharge Channel <input type="checkbox"/> Clear <input type="checkbox"/> Trees/brush <input type="checkbox"/> Leakage <input type="checkbox"/> Headcutting (_____ feet from spillway control section, depth _____ feet.)		
Stilling basin <input type="checkbox"/> N/A <input type="checkbox"/> Functional <input type="checkbox"/> Minor Erosion <input type="checkbox"/> Severe Erosion/Undercutting		
Aux. Spillway <input type="checkbox"/> Yes <input type="checkbox"/> No (use comments below)		
Detail:	<u>Weld can not reach, not inspected</u>	

Seepage/Leakage	Rating
Serious conditions <input type="checkbox"/> Leakage <input type="checkbox"/> Piping <input type="checkbox"/> Discolored water <input type="checkbox"/> Boils	
Locations* <input type="checkbox"/> No evidence <input type="checkbox"/> Center <input type="checkbox"/> Left <input checked="" type="checkbox"/> Right <input type="checkbox"/> Around pipe <input type="checkbox"/> On dam	<u>4</u>
Flow <input type="checkbox"/> Wet vegetation <input type="checkbox"/> Spongy <input type="checkbox"/> Standing water <input type="checkbox"/> Flow <u>25</u> gpm	<u>4</u>
Toe drains <input checked="" type="checkbox"/> None <input type="checkbox"/> Working <input type="checkbox"/> Damaged <input type="checkbox"/> Buried	
Detail:	<u>right abutment only - clear, at abutment</u>

Conduit		Control: <input type="checkbox"/> Manual <input type="checkbox"/> Power <input type="checkbox"/> Other <input type="checkbox"/> Conduit Control missing	Rating
Inlet	<input checked="" type="checkbox"/> Submerged <input type="checkbox"/> Debris on Trash Rack <input type="checkbox"/> Deterioration		✓
Trickle tube	<input checked="" type="checkbox"/> None <input type="checkbox"/> Screened <input type="checkbox"/> Blockage <input type="checkbox"/> Deterioration		✓
Control/Stem	<input type="checkbox"/> Operable <input type="checkbox"/> Damaged <input type="checkbox"/> Missing *		2/3 ✓
Valve(s) cycling	<input type="checkbox"/> Frozen <input type="checkbox"/> Unknown <input type="checkbox"/> Past year <input type="checkbox"/> Frequent		✓
Pipe 18"	Diameter/Size: _____ Material <u>Concrete</u>	Condition _____	✓
Primary outlet	<input type="checkbox"/> Overgrown <input checked="" type="checkbox"/> Clean <input type="checkbox"/> Pressurized <input type="checkbox"/> Leaking _____ gpm		✓
Other outlet(s)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Type(s) <u>Gate</u> Diameter(s) <u>36</u> in.		✓
Detail:	<u>Both operational - Controls - finish work</u> <u>Stop - But building dry</u>		

Structure of dam		<input type="checkbox"/> Earth <input type="checkbox"/> Rock <input type="checkbox"/> Concrete <input type="checkbox"/> Other	Rating
Distress	<input type="checkbox"/> Cracks - offset _____ in <input type="checkbox"/> Landslide(s) <input type="checkbox"/> Sinkhole(s) <input type="checkbox"/> Crest Settlement <input type="checkbox"/> Narrow crest <input type="checkbox"/> Wave erosion <input type="checkbox"/> Trampling <input type="checkbox"/> Surface erosion		✓
Locations*	<u>no distress since 4/12 restriction</u>		✓
Other	Describe _____		
Aux. dike (s)	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> over 5		
Animals	<input type="checkbox"/> Nutria <input type="checkbox"/> Badger Other <u>Snakes</u> <input type="checkbox"/> Unknown		Rating
Burrows	<input type="checkbox"/> Observed max diameter _____ in max depth _____ ft <input type="checkbox"/> Trails		✓
Locations*			
Vegetation			Rating
Cover	<input type="checkbox"/> Low grass <input type="checkbox"/> high grass <input checked="" type="checkbox"/> brush <input type="checkbox"/> blackberries <input type="checkbox"/> small trees <input type="checkbox"/> large trees		✓
Locations*			
Impairs inspection	<input type="checkbox"/> toe seepage <input type="checkbox"/> conduit outlet <input type="checkbox"/> spillway <input type="checkbox"/> upstream face <input type="checkbox"/> downstream face <u>No</u>		✓
Detail:			

*Locations – Upstream face, Crest, Downstream face, Left and Right abutments, Toe

Expedited Re-inspection Needed: ☐ Next Inspection Date: _____

Other Issues or Additional Detail Needed:
